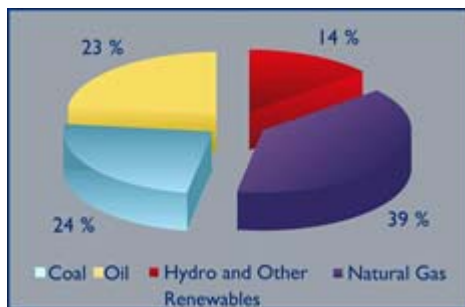


# ENERGY

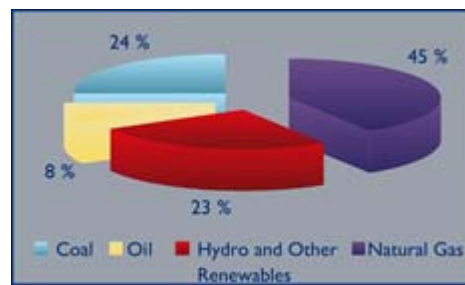
Total primary energy supply in Turkey as of 2003 is 84 mtoe. 28.3% of this was provided domestically and the rest was imported. Total installed electricity production capacity as of 2003 is 35,587 MW and it is expected to be estimated to have reached to 37,480 MW by 2004 and an additional 54,080 MW is projected to be installed by 2020. As of 2003, total electricity consumption is 142.8 billion kWh and total energy consumption is 82.3 mtoe. During the last 40 years, energy consumption in Turkey increased by an average of just above 5% annually while the electricity consumption rose more than 10% annually. Despite these high rates, primary energy and electricity consumption levels are still quite below the developed countries.

## Energy Consumption and Electricity Generation in 2003

**Primary Energy Consumption by Fuel Types (2003)**



**Electricity Generation by Fuel Types (2003)**



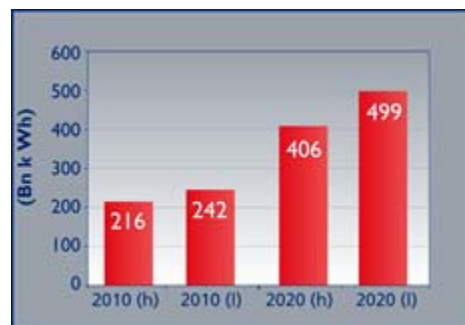
Hydraulic and other renewable energy resources has a 23% share in electricity generation. Total installed hydraulic capacity is 36,839 MW and the potential capacity is estimated to be at 127,820 Gwh. 11,400 MW of that potential is projected to be added to the existing capacity between 2005-2011. World Bank has recently provided a 200 million USD credit for investments in renewable energy resources. Also, private sector participation will be promoted by a Renewable Energy Law.

## Energy and Electricity Demand and Projections

**Primary Energy Demand**



**Primary Electricity Demand**



Source: Ministry of Energy and Natural Resources, Energy Market Regulatory Board, State Planning Organization, Undersecretariat of Treasury

## Regulatory Changes in the Energy Market:

The regulatory reform in the electricity and the natural gas sectors has been launched by the enactment of the Electricity Market Law in March 2001 and has been continued by the enactment of the Natural Gas Law in May 2001. In the light of the recent changes in the legislation:

- The Electricity law stipulates the licensing of electricity activities for the liberalization of the market. It sets a licensing procedure both for generation and distribution facilities. The electricity transmission activities shall be conducted by the Transmission Company (it is defined by the law) shall take over all transmission facilities owned by TEAS or the Treasury. 109 licenses related to the electricity market has been issued by the Energy Market Regulatory Board in 2004. Distribution licenses will continue to be tendered in 2005 and production licenses will follow in 2006.
- All private companies operating in the energy market should be established as either a Turkish joint stock company or a Turkish limited company. The possibility of operating as a branch of a foreign company has not been yet envisaged.
- TEAS is reorganized by the new law. Accordingly, three separate economic enterprises are established: Turkish Electricity Transmission Joint Stock Company (responsible for operating the national grid), Turkish Electricity Generation Joint Stock Corporation (responsible for operating power-generation facilities) and Turkish Electricity Trading Joint Stock Corporation (responsible for purchasing electricity).
- An independent Energy Market Regulatory Authority (EMRA) has been set up which will undertake a monitoring and auditing of electricity and gas sectors on behalf of public in accordance with the new legal framework and ensuring the formation of Energy Market Regulatory Board which will represent and govern the Energy Market Regulatory Agency.
- International arbitration is allowed for settlement of disputes.
- The Authority of the High Council has been limited to giving advisory opinion about concession contract agreements within two months, rather than binding decisions.
- Electricity production and distribution projects included the BOT scheme and BOT contracts are not considered as concession contracts, but private law contracts.
- Liberalization of electricity and gas sectors in harmonization with the EU Electricity and Gas Directives and opening of these sectors to competition was ensured.

The monopolistic position of BOTAS in the gas sector has ended. Energy Market Regulatory Board has issued 35 licenses of natural gas distribution in 2004 and regulations related to the transfer of importing licenses to private sector will be completed in 2005.

## Energy Sector Privatization Portfolio

### Turkish Electricity Distribution Inc

### Yeniköy Electricity Generation and Trade Inc

### Kemerköy Electricity Generation Inc

Çatalagzi Lignite Generation Plant*	Suatugurlu Hydroelectric Generation Plant*
Orhaneli Lignite Generation Plant*	Kiliçkaya Hydroelectric Generation Plant*
Seyitömer Lignite Generation Plant*	Çamlığöze Hydroelectric Generation Plant*
Ambarli Lignite Generation Plant*	Ataköy Hydroelectric Generation Plant*
Ambarli Fueloil Lignite Generation Plant*	Köklüce Hydroelectric Generation Plant**

Hopa Lignite Generation Plant*	Almus Hydroelectric Generation Plant
Aliaga K.C.G.T. Lignite Generation Plant*	Sariyar Hydroelectric Generation Plant*
Bursa Gas Lignite Generation Plant*	Yatagan Electricity Generation Plant***
Jeotermal Lignite Generation Plant*	Gökçeada Hydroelectric Generation Plant*
Altinkaya Hydroelectric Generation Plant*	Yenice Hydroelectric Generation Plant*
Hirfanli Hydroelectric Generation Plant*	Beyköy Hydroelectric Generation Plant*
Kesikköprü Hydroelectric Generation Plant*	Electricity Distribution Inc. (TEDAS)****
Derbent Hydroelectric Generation Plant*	
Kapulukaya Hydroelectric Generation Plant*	
Hasanugurlu Hydroelectric Generation Plant*	

Source: Privatization Administration ([http://www.oib.gov.tr/portfoy/enerji\\_eng.htm](http://www.oib.gov.tr/portfoy/enerji_eng.htm))

\* Has been taken into the portfolio on May 30, 2003

\*\* Has been taken into the portfolio on September 03, 2003 and transferred to Eti Aliminium

\*\*\* Has been taken into the portfolio and program on August 13, 2003

\*\*\*\* Has been taken into the portfolio and program on April 02, 2004